

# Drug Metabolite Certified Reference Materials

Drug metabolites play a major role in identifying, confirming, and quantifying drugs of abuse. They are often the only remaining evidence of a rapidly metabolized drug, and their predictive fragmentation patterns provide much needed clues for identifying unknowns. Cayman Chemical offers Certified Reference Materials (CRMs) for many of the major metabolites of opioids, benzodiazepines, stimulants, cannabinoids, and more. Our CRMs meet ISO/IEC 17025 and ISO 17034 standards and are sold as quantitative solutions in sealed ampules.



**ACCREDITED**  
**ISO/IEC 17025 #AT-1773**  
**ISO 17034 #AR-1774**

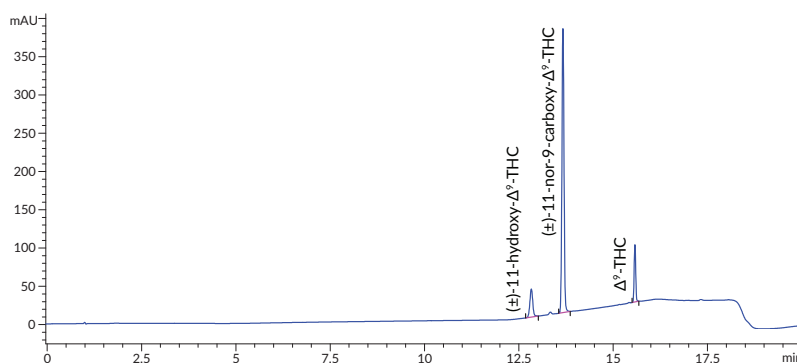
## FEATURED CRM MIXTURE

### $\Delta^9$ -THC Metabolite Mixture (CRM)

Item No. 33167

A 1 ml solution in methanol containing:

- ( $\pm$ )-11-hydroxy- $\Delta^9$ -THC (100  $\mu$ g/ml)
- ( $\pm$ )-11-nor-9-carboxy- $\Delta^9$ -THC (500  $\mu$ g/ml)
- $\Delta^9$ -THC (100  $\mu$ g/ml)



## Phytocannabinoid Metabolites

| Item No. | Product Name                                      |
|----------|---------------------------------------------------|
| 34023    | (-)-11-hydroxy- $\Delta^8$ -THC (CRM)             |
| 34024    | (-)-11-nor-9-carboxy- $\Delta^8$ -THC (CRM)       |
| 33076    | (-)-7-hydroxy Cannabidiol (CRM)                   |
| 21667    | ( $\pm$ )-11-hydroxy- $\Delta^9$ -THC (CRM)       |
| 20754    | ( $\pm$ )-11-nor-9-carboxy- $\Delta^9$ -THC (CRM) |

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

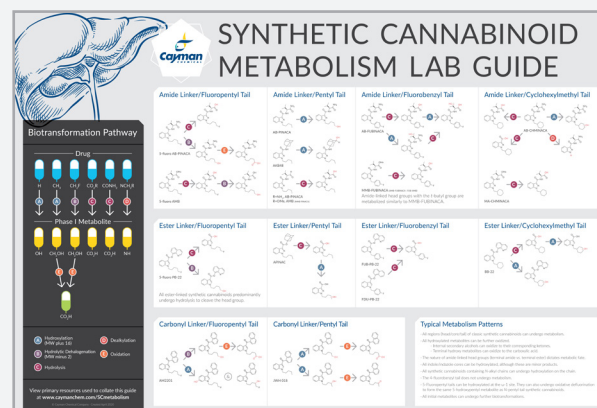
## Synthetic Cannabinoid Metabolites

| Item No. | Product Name                                               |
|----------|------------------------------------------------------------|
| 17771    | AB-FUBINACA metabolite 3 (CRM)                             |
| 18789    | 5-fluoro AMB metabolite 7 (CRM)                            |
| 28187    | 4-fluoro MDMB-BUTINACA butanoic acid metabolite (CRM)      |
| 28232    | 4-fluoro MDMB-BUTINACA N-(4-hydroxybutyl) metabolite (CRM) |
| 26318    | 5-fluoro PB-22 3-carboxyindole metabolite (CRM)            |

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Synthetic Cannabinoid Metabolism Lab Guide Poster

Request the lab guide designed to help identify clinically relevant metabolites from several major classes of synthetic cannabinoids.



Download or request the physical poster at [www.caymanchem.com/literature](http://www.caymanchem.com/literature)

**Custom Mixtures, Screening Libraries, and Plates Available**  
Email [sales@caymanchem.com](mailto:sales@caymanchem.com) to discuss your specific project needs

## Synthetic Opioid Metabolites

| Item No. | Product Name                                            |
|----------|---------------------------------------------------------|
| ISO60130 | Acetyl norfentanyl (hydrochloride) (CRM)                |
| 22700    | 4-ANPP (CRM)                                            |
| 19561    | Butyryl norfentanyl (hydrochloride) (CRM)               |
| 18751    | O-Desmethyl- <i>cis</i> -tramadol (hydrochloride) (CRM) |
| 26428    | Despropionyl <i>para</i> -Fluorofentanyl (CRM)          |
| ISO60195 | Norfentanyl (CRM)                                       |
| 19559    | Furanyl norfentanyl (hydrochloride) (CRM)               |
| 22182    | Norcarfentanyl (hydrochloride) (CRM)                    |
| 20899    | Normeperidine (hydrochloride) (CRM)                     |

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## Benzodiazepine Metabolites

| Item No. | Product Name                       |
|----------|------------------------------------|
| 25517    | $\alpha$ -hydroxy Alprazolam (CRM) |
| 20225    | 7-Aminoclonazepam (CRM) *          |
| 19053    | 7-Aminoflunitrazepam (CRM) *       |
| 19293    | 7-Aminonimetazepam (CRM)           |
| 19698    | Desalkylflurazepam (CRM) *         |
| 18888    | N-Desmethyloclobazam (CRM)         |
| 23982    | N-Desmethyflunitrazepam (CRM)      |
| ISO60202 | Lorazepam (CRM)                    |
| 27242    | Nifoxipam (CRM)                    |
| ISO60174 | Nordiazepam (CRM) *                |
| ISO60173 | Oxazepam (CRM) *                   |

\* Labeled standard also available

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Analytical Standard Panels Available for:

- Cathinones & Their Metabolites
- Tryptamines & Their Metabolites
- Benzodiazepines & Their Metabolites



LEARN MORE AT:  
[www.caymanchem.com/compoundlibraries](http://www.caymanchem.com/compoundlibraries)

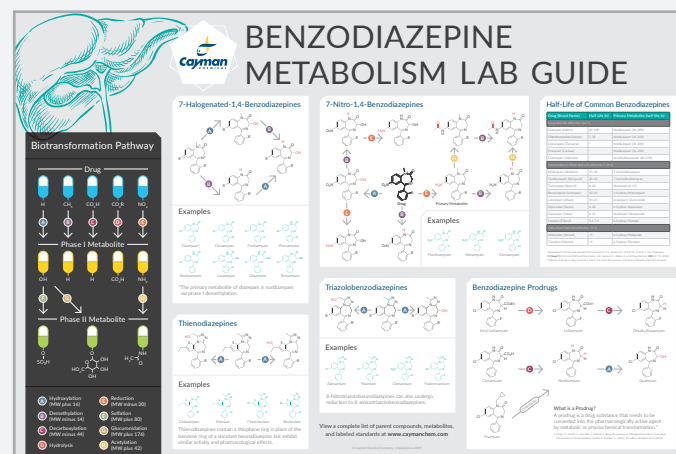
## Opiate Metabolites

| Item No. | Product Name                         |
|----------|--------------------------------------|
| 19418    | 6-Acetylmorphine (CRM)               |
| 25669    | 6 $\beta$ -Hydromorphol (CRM)        |
| ISO60146 | Hydromorphone (CRM)                  |
| 20127    | Norbuprenorphine (CRM)               |
| 22661    | Norhydrocodone (hydrochloride) (CRM) |
| ISO60171 | Oxymorphone (CRM)                    |
| 25938    | 6 $\alpha$ -Oxycodol (CRM)           |
| 25939    | 6 $\beta$ -Oxycodol (CRM)            |
| 25940    | 6 $\alpha$ -Oxymorphol (CRM)         |

See all parent compounds and internal standards at [www.caymanchem.com](http://www.caymanchem.com)

## Benzodiazepine Metabolism Lab Guide Poster

Request our wall poster designed to help labs identify clinically relevant phase I and II benzodiazepine metabolites.



Download or request the physical poster at  
[www.caymanchem.com/literature](http://www.caymanchem.com/literature)

## Stimulant & Hallucinogen Metabolites

| Item No. | Product Name                                |
|----------|---------------------------------------------|
| ISO60186 | Benzoylcegonine (CRM) *                     |
| 35016    | Butylone (hydrochloride) (CRM) *            |
| 28820    | Cocaethylene (CRM)                          |
| 19208    | N-Formylamphetamine (CRM)                   |
| 26615    | (+)-Methamphetamine (hydrochloride) (CRM) * |
| 20128    | Norketamine (hydrochloride) (CRM)           |
| 9003135  | Psilocin (CRM)                              |

\* Labeled standard also available

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